

REMARKS

This Amendment is being filed in response to the Office Action mailed June 20, 2008, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the remarks to follow are respectfully requested.

In the Office Action, claims 1-7 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,160,826 (Swanson) in view of an article entitled "Optical Coherence Tomographic Imaging of Human Tissue at 1.55 μ m and 1.81 μ m using Er- and Tm Doped Fiber Sources" (Bouma), an article entitled "196-fs Passively Mode-Locked Thulium Fiber Laser with a Low Threshold" (Sharp) and U.S. Patent No. 5,365,335 (Sorin). It is respectfully submitted that claims 1-7 are patentable over Swanson, Bouma, Sharp and Sorin for at least the following reasons.

As correctly noted on page 4 of the Office Action, Swanson does not disclose or suggest a balanced detector. Sorin is cited in an attempt to remedy the deficiencies in Swanson.

Sorin is directed to a low-coherence reflectometer for use in

measuring optical backscattering. As clearly shown in FIG 5, and described on column 5, line 59 to column 6, line 10, a signal reflected from a mirror 331 is attenuated by an attenuator 340. The attenuated signal is then provided to a coupler 316 which combines the attenuated signal with the backscattered light from a sample device under test 12. That is, the combined signal is formed from the signal reflected from the sample 12 and the attenuated reference signal.

In stark contrast, the present invention as recited in independent claim 1, amongst other patentable elements recites (illustrative emphasis provided):

combine a reflected beam from the reference reflector with a returning beam from the sample space to form a combined beam, and provide the combined beam to a first port of the photodetector, and

a further beam splitter which receives part of a radiation from the beam splitter-combination arrangement and couples out a reference signal to a second port of the photodetector, wherein the photodetector scales and subtracts the combined signal and the reference signal to form an output photodetector signal having a reduced noise for output from the photodetector.

It is respectfully submitted that Swanson, Sorin and combination thereof, do not teach or suggest a photodetector that

scales and subtracts the combined signal and the reference signal. Rather, Sorin discloses to attenuate signal reflected from a mirror 331. Scaling a combined signal, which is formed by combining a reflected beam from reference reflector with a returning beam from the sample space, is nowhere disclosed or suggested in Swanson and Sorin, alone or in combination. Bouma and Sharp are cited to allegedly show other features and do not remedy the deficiencies in Swanson and Sorin.

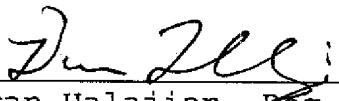
Accordingly, it is respectfully submitted that independent claim 1 is allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2-7 should also be allowed at least based on their dependence from amended independent claim 1.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of

the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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